

**Guidance for Enhanced Influenza Surveillance Related to
Recent U.S. Novel Influenza A (H3N2) Cases**

**Michigan Department of Community Health
December 15, 2011**

As described in the *Background Information on Recent Human Cases of Novel Influenza A (H3N2)* document, recent human infections with a novel influenza A (H3N2) have suggested that limited human-to-human transmission of this virus has occurred. The Centers for Disease Control and Prevention (CDC) has asked all states to increase testing of influenza-like illness cases in order to identify additional potential infections with this virus and to evaluate the frequency of human-to-human transmission.

The Michigan Department of Community Health (MDCH) has developed the following guidance for healthcare providers, hospitals and laboratories to insure suspect novel influenza cases are identified and investigated quickly. This interim guidance remains in effect until future updates are provided by MDCH.

Requested Actions for Healthcare Providers, Hospitals and Laboratories

- Influenza testing for all patients with an influenza-like illness (ILI) is highly recommended
 - ILI is defined as a fever of $\geq 100.1^{\circ}\text{F}$ with a cough and/or a sore throat, in the absence of a known cause other than influenza
 - Testing of cases with atypical symptoms, such as respiratory symptoms with vomiting, or headache and fever without respiratory symptoms, may be considered
- While testing of all ILI cases is encouraged as this point, there is increased emphasis on the following populations with ILI:
 - Children <18 years of age, as most of the confirmed cases have been in young children
 - Particularly severe or unusual cases, including pediatric deaths
 - Persons who were appropriately vaccinated but present with influenza-like symptoms
 - Persons with a history of swine (pig) exposure in the two weeks before symptom onset
 - Outbreaks or clusters of ILI cases, particularly in daycares, schools or camps
- Immediately notify the MDCH Division of Communicable Disease at (517) 335-8165 of any suspect novel cases based upon either preliminary laboratory testing results or epidemiologic information. Rapid referral of specimens to MDCH for further testing is essential for timely case identification and characterization of transmission routes.
- Specimens for influenza testing may be tested either through your facility's standard protocols or be submitted directly to the MDCH Bureau of Laboratories
 - The following link has information regarding specimen collection and submission to MDCH: http://www.michigan.gov/mdch/0,1607,7-132-2945_5103-213906--,00.html.

- Please forward ALL positive influenza specimens, regardless of testing method, to the MDCH Bureau of Laboratories
 - Positive specimens that are unsubtype or influenza A positive are of greatest interest
 - Influenza B specimens will also be accepted for seasonal influenza surveillance testing
 - Specimens from patients with illness highly consistent with influenza but negative by rapid testing methods can also be sent to MDCH

Notes On Laboratory Detection of Novel A (H3N2) Influenza

- Rapid influenza tests have been inconsistent in their ability to detect this novel virus
- RT-PCR assays have been shown to be the best method to detect this virus
 - This novel virus should appear as an inconclusive influenza A result with these findings: *Influenza A+ / InfA pdm09+ / H3+*
 - However, one confirmed novel influenza A (H3N2) case tested at a public health laboratory showed only a positive result for influenza A (H3), with a high Ct count (low viral load)
- MDCH will use RT-PCR to test all influenza A-positive specimens
 - This testing will distinguish between seasonal A (H3), 2009 A (H1N1) and potential novel influenza strains including this particular novel virus
 - Any inconclusive or unsubtypeable results will be forwarded to CDC for further testing

Treatment, Infection Prevention and Vaccination

- At this time, no changes have been suggested by CDC for the treatment of influenza, including infections with the novel influenza A (H3N2) virus. The virus is susceptible to oseltamivir and zanamivir but resistant to amantadine and rimantadine.
- At this time, no changes have been suggested by CDC to current influenza infection control recommendations
- Seasonal influenza vaccine would be expected to provide limited cross-protection against the novel influenza A (H3N2) virus. However, vaccination is still recommended as the best way to protect yourself from seasonal influenza infection.

Any questions regarding this situation or the information in this guidance document can be directed to the MDCH Division of Communicable Disease at (517) 335-8165.

Thank you for all that you do for Michigan influenza surveillance efforts!